

Tekleen Self-Cleaning Water Filtration System Super-Cleans Washing Water and Enables Water Re-Use at Health Juice Processing Plant

A Tekleen water filtration system is installed in the cleaning flow.

Suja Life, LLC turns fruits and vegetables into juice known as Suja Juice that is cold pressed and never heat-processed. This process is known as the Suja cold-pressured process, developed to maintain essential vitamins, minerals and enzymes in the juice, and to extend product shelf life. The high pressure process (HPP) kills harmful bacteria while preserving maximum nutrition and taste. The process requires thorough cleaning of the fruits and vegetables before pressing.

The Suja plant handles pineapples, carrots, spinach, kale, apples, celery and ginger. Citrus fruits are not processed here.

Fruits and vegetables are thoroughly washed in water to cleanse away any debris or soil that might be left over from the growing environment and from handling. Washing takes place in a conveyor flume where the wash water is constantly being circulated and filtered to maintain cleanliness.

During the process, the wash water is continuously passed through the self-cleaning Tekleen system, where it is filtered down to 100 microns. Then the clean filtered water is recirculated back into the cleansing flume.

Throughout the process, the self-cleaning Tekleen filter automatically cleans its own filters and supplies filtered water to the flume.

The washed fruits or vegetables pass out of the flume to drain, and then are chopped into manageable pieces, and pressed under high pressure to extract the juice.

Information was kindly supplied during an interview with Jim Mathews, Operations Manager at Suja Life, LLC. Mr. Mathews has had extensive previous experience with the Tekleen self-cleaning filters in many applications. Photos were provided through the courtesy of Mr. Mathews and Suja Life LLC.

Tekleen is located in Los Angeles, CA.

Please visit www.tekleen.com

Results of the Tekleen Installation

According to Operations Manager Jim Mathews, prior to the installation of the Tekleen filtration system, the old system "required a shutdown every hour or two to discharge the waste water." The downtime impacted productivity and used a lot of water. With the Tekleen self-cleaning filter system in place, the filter needs only to be cleaned once a day as part of the sanitation process, where the tank is cleaned and water is discharged into the sewer system. According to Mr. Mathews, "the new installation using Tekleen saves up to 4000 gallons of water a day, after running an 8 to 10-hour day."

Installation went smoothly. The Tekleen system used in this flume installation features stainless steel construction. Additional Tekleen systems are being installed to accommodate juicing plant expansion.



Celery passing through the washing flume



A self-cleaning Tekleen filter unit installed beneath the washing flume



Tekleen industrial self-cleaning water filters are suitable for a wide range of applications: HVAC, petrochemical, pulp & paper, drinking water, golf & turf, sugar processing, metal processing, waste water, sea water filtration, greenhouse & nursery, plastics manufacturing, food industry, power generation, car wash water reuse and recycling, and fruit & vegetable irrigation.